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LIFE/SAFETY ISSUES AND CONSIDERATIONS

An important consideration in building design and renovation is to accommodate life safety and security needs. This becomes more complex when dealing with historic structures. Since most historic structures were built before the existence of building, electrical, HVAC, and accessibility codes, they often do not provide adequate life safety and security measures based on today's standards. Extra efforts must be taken to preserve the historic nature of the structure while still providing appropriate, safe facilities. Since historic structures are all unique, careful planning and coordination between many disciplines must take place to ensure that life safety and security needs are met, while still maintaining the historical integrity of the structure.

Building, life safety and security codes provide security and protection for the structure and its occupants. They are intended to protect the health, safety and welfare of all human occupants while additionally protecting the integrity of the historic structure. These codes set minimum requirements for structural, physical, environmental and safety items related to the structure. Common issues that must be addressed include:



Example of a historic mill with an accessible ramp

- Building egress
- Fire and smoke detection and separation
- Fire suppression
- Emergency exits
- Accessible ramps, handrails and other items to provide equal access for those with disabilities.

The protection of building occupants is always the top priority, but when dealing with historic structures, the protection of historically significant structures and assets must also be considered.

The Americans with Disabilities Act (ADA) is a civil rights legislation that prohibits discrimination against those with disabilities. Since most historic structures were not designed to be accessible, extensive retrofitting is often required in the form of ramps, wider doorways, accessible restroom stalls and handrails. Buildings meant to be viewed externally will also need accessible paths to windows and doors if indoor exhibits are to be installed for viewing.

A change of building use typically means the entire structure must be upgraded to meet current code requirements. The goal is to blend all retrofits into the style of the building in order to keep the additions as unnoticeable as possible, or to make them appear as if they have always been a part of the structure. Due to the uniqueness of each historic structure, each case should be looked at separately in order to mimic the style and building techniques used during the original construction.

Each structure should be looked at holistically with the knowledge that all structures will require a unique plan of action. Careful planning and coordination between many disciplines including park staff/facility managers, the North Carolina State Historic Preservation Office (SHPO), designers and code officials is necessary to address the issues successfully. During building retro-

fits, it may be necessary for the plans to accommodate important life safety and security issues, such as locating egress ramps or installing fire/security equipment in concealed locations.

The architectural assessment by Ellen Cassilly (Appendix B) and the FCAP (Appendix E) prepared by the State Construction Office found many related issues after review of the historic structures at Long Valley Farm. These issues include replacement of obsolete electrical, mechanical, plumbing, and HVAC Components, asbestos abatement, and lack of accessible entrances.